

## Arrows

Draw arrows in the squares around the large square! Each square has one arrow and each arrow points at least to one number. The numbers show how many arrows point to them.


|  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 2 | 5 | 1 | 4 | 3 | 3 |  |
|  | 4 | 3 | 5 | 5 | 2 | 6 |  |
|  | 2 | 2 | 1 | 4 | 1 | 3 |  |
|  | 4 | 4 | 1 | 4 | 4 | 3 |  |
|  | 5 | 3 | 3 | 4 | 1 | 5 |  |
|  | 1 | 4 | 2 | 3 | 0 | 3 |  |

## Starting points

Draw lines starting from the squares containing digits. These digits always show the sum of the lengthes of the lines starting from that square. The lines must not cross or overlap each other, and may only pass through the middle lines of the squares.

|  |  |  |  | 6 |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | 2 |  |  |  |  |
| 9 |  |  |  |  | 2 |  |
|  |  |  | 4 |  |  |  |
|  | 1 |  |  |  |  | 5 |
|  |  |  |  | 5 |  |  |
|  |  | 6 |  |  |  |  |

20 p


| 8 |  |  |  |  | 7 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | 3 |  |  |  | 6 |  |
|  | 6 |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 8 |  |  |
|  |  | 2 |  |  |  |  |  | 6 |
|  |  |  |  |  | 2 |  |  |  |
|  |  |  | 4 |  |  |  |  |  |
| 4 |  |  |  |  |  | 2 |  |  |
|  |  |  |  | 10 |  |  |  |  |

## Mathematical squares

Fill in the square with the digits from 1 to 9 in such a way the result of the operations must be the number written into the square at the end of the rows and columns. Each number should be used only once.

$20 p-20 p$
20 p

|  | $x$ |  | - |  | $=$ | 13 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $x$ |  | $x$ |  | $x$ |  |  |
|  | $x$ |  | - |  | $=$ | 19 |
| - |  | - |  | - |  |  |
|  | $x$ |  | - |  | $=$ | 17 |
| $=$ |  | $=$ |  | $=$ |  |  |
| 19 |  | 16 |  | 39 |  |  |




Fill in the ships with the numbers from 1 to $8(10,12)$ in such a way the sum of the numbers in each row and column must be the number written around the large square. Each number


87 should be used only once.

## 20 p




## Anglers

The anglers sit on the shore of the lake represented by the large square. Each of the anglers has catched one of the fishes. The numbers representing the anglers show how long their rope is until their fish. The ropes only move horizontally or vertically through the middle lines of the squares, and do not cross each other. Work out which fish belongs to which angler, and the paths of the ropes.


13

16


20 p


40 p
Divide the figure into two parts. The shape of one part must be the mirror image of the other part, rotated by 90 degrees. The dividing lines always pass through the gridlines or the diagonal lines of the grids.


|  |  |  | 4 | 5 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 |  |  |  |  | 6 |  |
|  | 4 | 1 |  | 2 |  |  |
|  |  |  | 3 |  |  | 7 |
| 19 | 10 | 12 | 19 | 12 | 21 | 19 |$\quad$|  |
| :---: |
| 20 p |


| 3 |  |  | 8 |  |  |  |  | 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 6 |  |  | 4 |  |  | 1 |  |
|  |  |  |  |  | 5 | 2 |  | 8 |
|  |  | 4 |  | 9 |  |  |  |  |
| 20 | 19 | 28 | 18 | 22 | 11 | 21 | 12 | 29 |


? ? ? ? 0

20 p
? ? ? ? ?

## Counting

Enter digits 1-7 (1-9) in the grids so that the digits add up to the number in the cell under the series. The digits in all rows and all columns differ from each other.

40 p

| 1 | 3 | 2 | 4 |
| :--- | :--- | :--- | :--- |
| 2 | 1 | 4 | 3 |
| 4 | 2 | 3 | 1 |
| 7 | 6 | 9 | 8 |

## Mastermind

A paper-and-pencil version of the classical Mastermind game. The colors have been substituted by letters.
The number of black dots shows the number of letters being on the correct position, and the number of white dots shows how many more letters are in the guess, that are of the correct color but not at the correct position. Any letter can appear more that once in the solution.


## Paint it Black

This game of Japanese origin is more and more popular worldwide.
The numbers on the left of each row and the top of each column tell you how many continuous groups of black squares there are in that line, and, in order, how many consecutive black squares are in each group. Between two groups of black squares there is atleast one, but maybe more white square.


| 100 p |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  | 1 | 1 | 1 | 1 | 5 |  |  |  |  |  |  |  |  | 2 | 1 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | 8 |  |  | 5 | 4 |  | 2 | 1 | 4 | 4 | 2 |  |  | 4 | 3 | 2 |  |  |  | 1 | 1 |  | 7 | 7 |  | 8 |  |
|  |  |  |  |  |  |  | 9 | 2 | 7 |  | 3 | 2 |  | 1 | 1 | 2 | 2 | 1 | 3 |  | 3 | 2 | 1 |  |  | 2 | 3 | 2 | 6 | 1 | 3 | 7 | 2 | 9 |
|  |  |  |  |  |  |  | 2 | 1 | 4 |  | 2 | 2 |  | 1 | 1 | 2 | 3 | 1 | 1 |  | 5 | 6 | 7 |  |  | 10 | 2 | 1 | 4 | 2 | 2 | 4 | 1 | 2 |
|  |  |  |  |  | 13 | 10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | 3 | 3 | 5 | 9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | 4 | 4 | 8 | 7 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 5 | 9 | 9 | 1 | 6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | 5 | 5 | 5 | 7 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 6 | 2 |  | 3 | 1 | 6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 6 |  | 5 | 2 | 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 2 | 1 |  | 4 | 4 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | 1 |  |  | 4 | 2 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 3 | 1 |  | 4 | 1 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | 2 |  |  | 5 | 2 | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 2 |  | 6 | 2 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 4 |  | 2 | 6 | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 2 |  |  | 6 | 2 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | 2 | 13 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Logical counting I.

Which number(s) fit(s) into the place of the question mark(s)?

$$
15 p-15 p-15 p-15 p
$$

| 7 | 9 | 5 | 6 |
| :---: | :---: | :---: | :---: |
| 12 | 17 | 24 | 15 |
| 9 | $?$ | $?$ | 21 |
| 15 | 11 | 18 | 13 |


| 84 | 27 | 19 | 3 |
| :--- | :--- | :--- | :--- |
| 59 | 7 | 13 | 4 |
| 103 | 18 | 17 | 5 |
| 98 | 14 | $?$ | 6 |


| 7 | 28 | 22 | 25 |
| :---: | :---: | :---: | :---: |
| 13 | 25 | $?$ | 19 |
| 10 | 31 | 28 | 22 |
| 16 | 13 | 19 | 16 |


| 15 | 379 | 24 |
| :---: | :---: | :---: |
| 32 | 988 | 66 |
| 54 | 987 | 43 |
| 70 | $?$ | 15 |

## ScRabble Puzzle

Place the listed writers in the grid in a way that each word should have at least one common letter with at least one another word. The letters in the grid (given in advance) should all be used by at least one word. There must not be any other words in the grid that are not on the list, not even two-letter words.



## Logical counting II.

Which number(s) fit(s) into the place of the question mark(s)?

$$
\begin{aligned}
& 10 p-10 p-10 p \\
& 10 p-10 p-10 p
\end{aligned}
$$

$4,6,10,14,22,26, ?$
$61,67,28,34,94,901, ? \ldots \ldots$


